

PROCEEDINGS
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REMOVAL OF GELATINOUS COATING FROM THE
SURFACE OF THE CARAPACE OF OSTRACODA IN
PREPARATION FOR THEIR EXAMINATION WITH
THE SCANNING ELECTRON MICROSCOPE

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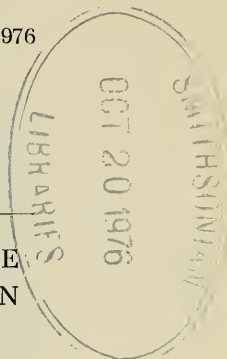
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The scanning electron microscope (SEM) permits the study in detail of morphological features of minute organisms previously only dimly visible when using the light microscope. It has proved extremely valuable for the study of the carapace of Ostracoda, minute Crustacea seldom exceeding 2 mm in length.

Some Crustacea, for example species in the ostracode family Sarsiellidae, are covered with a gelatinous substance of unknown chemical composition. When the specimen is dried during preparation for the SEM, the gelatinous coating forms an amorphous mass that masks the morphological details of the underlying carapace and produces an unsightly micrograph (Fig. 1a, c, e).

Banks and Williams (1972) described a procedure for removing wax, resins and exudates from the surface of insects prior to their taxonomic study. I tried a slight variation of the procedure recommended by Banks and Williams in an attempt to remove the gelatinous substance from the carapaces of sarsiellids. After soaking carapaces overnight in a strong solution of the surfactant Contrad 70,¹ a pellet of solid KOH was added to the solution, which was then

¹ Manufactured by Harlco, 60th and Woodland Avenue, Philadelphia, Pennsylvania 19143, under license from Decon Laboratories Ltd., Ellen St. Portslade, Brighton, U.K.



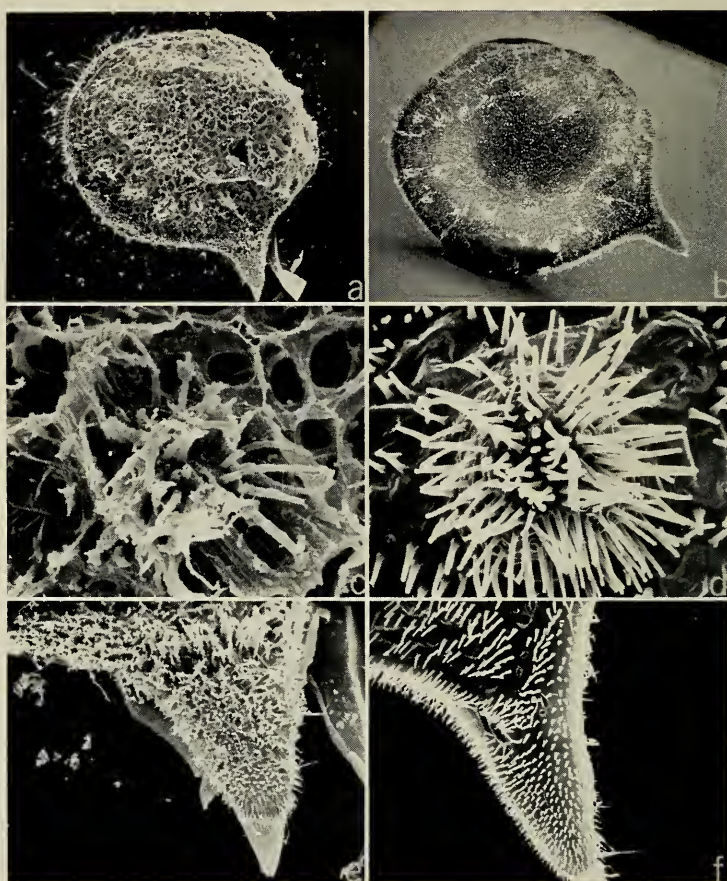


FIG. 1. *Sarsiella* sp.: a, c, e, Untreated left valve; b, d, f, Chemically prepared left valve.

boiled for 5 min. That this treatment successfully removed the gelatinous substance can be seen by comparing the SEM photographs (Fig. 1) of untreated (a, c, e) and treated (b, d, f) carapaces showing the same morphological features of two different specimens of the same species of *Sarsiella*.

The procedure for removing a gelatinous substance may be useful in the preparation of other groups of Ostracoda or Crustacea having a similar or chemically related coating.

LITERATURE CITED

- BANKS, H. J., AND D. J. WILLIAMS. 1972. Use of surfactant, Decon 90, in the preparation of coccids and other insects for microscopy. *Journal of the Australian Entomological Society* 11: 347-348.

